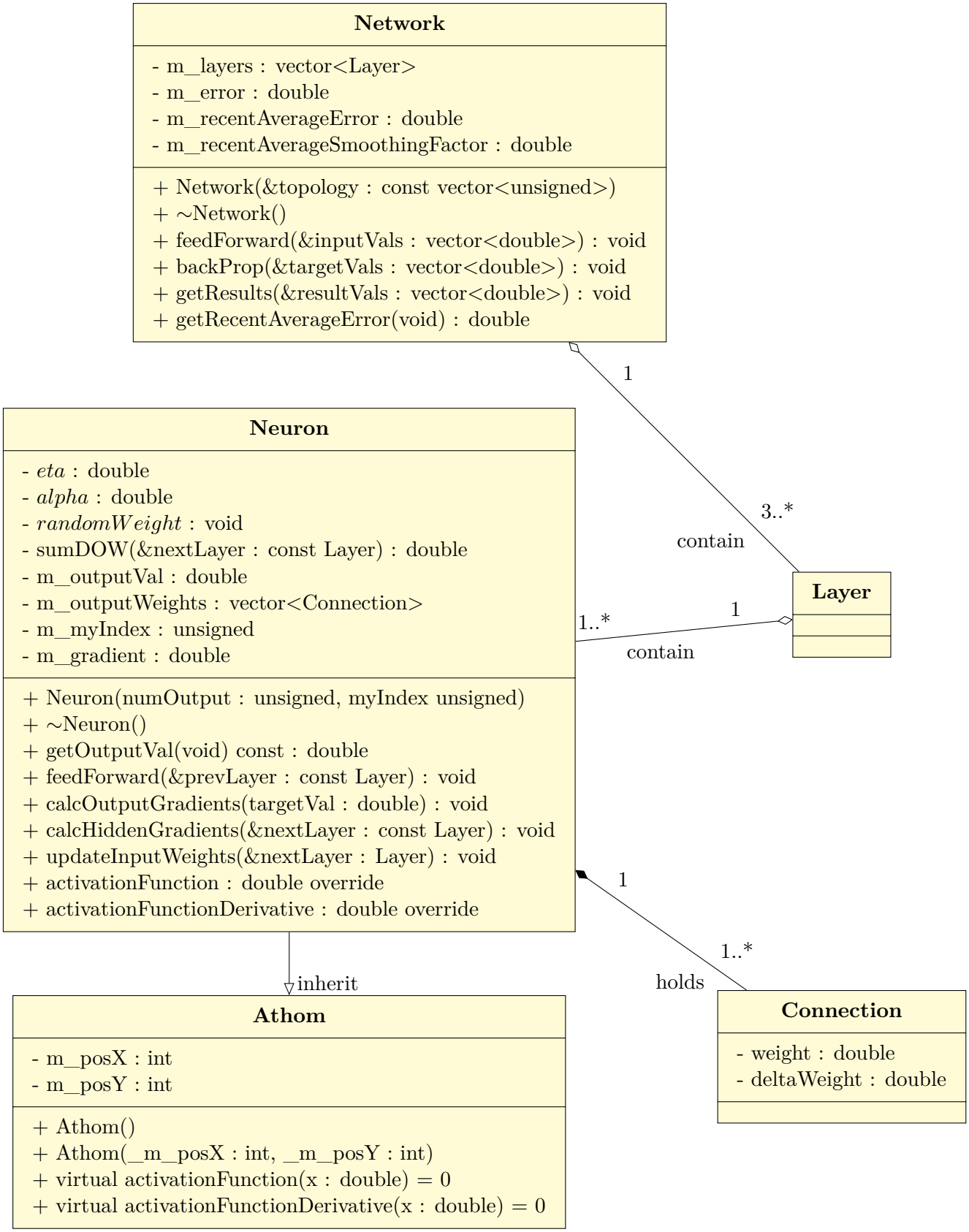
TrainingData
- m_trainingDataFile : ifstream
+ TrainingData(filename : const string) + ~TrainingData() + isEof(void) : bool + getTopology(&topology : vector<unsigned>) : void + getNextInputs(&inputVals : vector<double>) : unsigned + getTargetOutputs(&targetOutputVals : vector<double>) : unsigned

Generation
- m_trainingDataFile : ofstream
+ Generation(filename : const string) + ~Generation()


Network
- m_layers : vector<Layer>
- m_error : double
- m_recentAverageError : double
- m_recentAverageSmoothingFactor : double
+ Network(&topology : const vector<unsigned>)
+ ~Network()
+ feedForward(&inputVals : vector<double>) : void
+ backProp(&targetVals : vector<double>) : void
+ getResults(&resultVals : vector<double>) : void
+ getRecentAverageError(void) : double
1
3..*
contain
Neuron
- eta : double
- alpha : double
- randomWeight : void
- sumDOW(&nextLayer : const Layer) : double
- m_outputVal : double
- m_outputWeights : vector<Connection>
- m_myIndex : unsigned
- m_gradient : double
+ Neuron(numOutput : unsigned, myIndex unsigned)
+ ~Neuron()
+ getOutputVal(void) const : double
+ feedForward(&prevLayer : const Layer) : void
+ calcOutputGradients(targetVal : double) : void
+ calcHiddenGradients(&nextLayer : const Layer) : void
+ updateInputWeights(&nextLayer : Layer) : void
+ activationFunction : double override
+ activationFunctionDerivative : double override
Layer
1..*
1
contain
1
1..*
holds
inherit
Athom
- m_posX : int
- m_posY : int
+ Athom()
+ Athom(_m_posX : int, _m_posY : int)
+ virtual activationFunction(x : double) = 0
+ virtual activationFunctionDerivative(x : double) = 0
Connection
- weight : double
- deltaWeight : double